



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# Functions of Supply and Marketing Cooperatives in Improving Rural Modern Circulation System

Conghui DU<sup>1</sup>, Yongwei CUI<sup>2\*</sup>

1. Canvard Institute, Beijing Technology and Business University, Beijing 101118, China; 2. Chinese Academy of Agricultural Engineering, Ministry of Agriculture, Beijing 100125, China

**Abstract** This paper firstly described current development situation of China's rural circulation system. In the process of accelerating modernization, the supply and marketing cooperative is always an essential force, but the gap between urban and rural circulation system is still expanding. On the basis of current development situation, it analyzed functions of supply and marketing cooperatives in rural logistics system. Finally, it came up with recommendations for improving China's rural circulation system. In the new period, it is recommended to bring into play advantages of supply and marketing cooperatives, expand the coverage, gradually promote industry upgrade of renewable resource recycling, and constantly strengthen functions of supply and marketing cooperatives in building the rural modern circulation system, to build supply and marketing cooperatives into new forces and comprehensive platform for farmers' production and living services.

**Key words** Supply and marketing cooperatives, Rural modern circulation system, Policy recommendations

## 1 Introduction

As the largest developing country in the world, China has largest portion of rural population. In the process of traditional agricultural economy transitioning to modern industrial economy, with the reform of circulation system reform, the circulation industry has become a pilot industry guiding development of national economy. In promoting coordinated urban and rural development, it has made significant contribution. Multiple-part links between urban and rural areas rely on modernization of organization mode, management channel, and infrastructure. With more than 30 years of reform and development, there have been tremendous changes in circulation network, organization channel, circulation models, market modes, and support policies of China's urban and rural circulation system<sup>[1]</sup>. China's rural areas are transitioning from natural economy to modern economy, and market mechanism gradually becomes decisive factor of rural resource allocation, forming new pattern of multi-level, multi-type, multi-channel, and multi-subject rural circulation system, and rural market system construction has realized considerable progress<sup>[2]</sup>.

The supply and marketing cooperatives adhere to serving agriculture, farmers and rural areas. Deeply rooted in rural areas for a long time, supply and marketing cooperatives have rich service experience, well-established network distribution and numerous practical talents. In the process of accelerating rural modern logistics system construction, supply and marketing cooperative is always an essential force and has become the largest cooperative economic organizations in China<sup>[3]</sup>. No. 1 document of central government in 2015 set forth the tasks of comprehensively deepening overall reform of supply and marketing cooperatives, sticking

to the direction of serving agriculture, farmers and rural areas, giving impetus to transformation of grass-roots cooperatives, innovating upon administration mechanism of cooperatives, extending service fields, and building supply and marketing cooperatives into backbone forces of providing integrated services for agriculture, farmers and rural areas. *Decision of the CPC Central Committee and the State Council on Deepening Comprehensive Reform of the Supply and Marketing Cooperatives* was formally issued. Supply and marketing cooperatives should adapt to new normal, and speed up the pace of reform, to realize transformational development. Thus, it is of great significance to studying functions of supply and marketing cooperatives in the construction of rural modern circulation system, accelerating reform and development of supply and marketing cooperatives, and providing recommendations for improving China's rural modern circulation system.

## 2 Current development situation of China's rural circulation system

In the new period, rural areas take accelerating modern circulation industry as breakthrough point and strengthen effort in construction of rural circulation market. These greatly support effective connection between rural areas, agriculture and farmers with market, and play a great role in accelerating construction of modern agriculture and agricultural and rural economic development. In the meantime, under the guidance of government, bringing into play decisive role of market resource allocation, and unified planning of urban and rural circulation market, and constantly cultivating market subject position of farmers are of great significance to promoting interactive development of urban and rural production and consumption, and rapid development of rural market circulation system<sup>[4]</sup>.

**2.1 Development of urban and rural circulation system in China** Since the reform and opening up, China's urban and rural

circulation system experienced initial stage of joint development (1978-1984), stage of joint development (1985-2000), and stage of joint development of domestic and foreign parties (2001-2004)<sup>[1]</sup>. From 2004 to the present, China implemented all-round opening, and then China's urban and rural circulation system construction has entered deepening state of joint development of domestic and foreign parties. Although coordinated development of urban and rural circulation system realized certain development, there is still no change in urban and rural dual circulation structure, and there are still differences between urban and rural circulation economic environment, circulation infrastructure, circulation management system, circulation channel, circulation organization, and circulation order. After entry to the 21st century, China's urban and rural commodity circulation volume has considerable growth. However, due to historical and institutional factors, the gap between urban and rural circulation is widening, and there are still differences between urban and rural total retail sales of consumer goods, commodity circulation market, commodity circulation subjects, and urban and rural logistics system development. Urban commodity market develops rapidly, and both commodity circulation speed and scale realize rapid development. In comparison, there are still few regular markets in rural areas, and irregular rural country fair trades are still major place of commodity circulation, it is still difficult to solve the problem of circulation between urban and rural areas.

**2.2 Current situations and existing problems in rural circulation system of China** With more than 30 years of reform and development, China has preliminarily established a multi-level, multi-type, multi-channel, and multi-subjects new pattern of rural circulation system with country fair trade as foundation, wholesale market as center, forward market as guidance, farmer brokers and transportation and sales dealer, intermediaries, and processing enterprises as subjects, and rural market system construction has realized considerable development<sup>[5]</sup>.

After entry to the 21st century, China attaches great importance to construction of rural market circulation system and has issued a series of support policies and measures. The Ministry of Commerce, the Ministry of Finance, and All-China Federation of Supply and Marketing Cooperatives successively launched the project of developing rural retail network, double hundred market project, new network project, rural commercial information service project, farmer-market docking project, and comprehensive pilot project of modern circulation for agricultural products, to provide policy and financial support for circulation of agricultural products. By 2011, China has established 2092 large county-wide commodity circulation markets, 3019 key county-wide markets, more than 4300 agricultural product wholesale market, 13 forward markets of agricultural products with turnover volume up to 55280 billion yuan, and 6 million people act as agricultural product brokers<sup>[6]</sup>. Nevertheless, on the whole, China's rural circulation market system construction still remains at starting stage and there is still a great gap compared with European and American devel-

oped countries and regions. Data indicate that circulation cost for fresh agricultural products accounts for more than 60% of total costs in China, while in developed countries, the figure is about 10%. The loss ratio of such fresh agricultural products as fruit and vegetable is 25-30% in circulation link; in developed countries, the figure is below 5%; the proportion of sales of agricultural products through farmer-market docking is 80% in European and American countries, 70% in Japan, and only 15% in China<sup>[7]</sup>.

At present, there is still no change in dual structure of China's economic development, the construction level of rural market circulation system infrastructure is lower than urban areas, and rural market circulation method also lags behind urban areas. There is a great gap with constantly expanding consumption demands, and modern agriculture and new socialist countryside construction for modern circulation. Besides, the gap between urban and rural markets and the gap between rural circulation system construction in west and east regions are widening. The rural market circulation subjects are still very weak, and the conflict between rural big market and small production is still very prominent, and problems of lagging in rural market supervision and management are to be solved urgently. Therefore, it is still necessary to take a long time to establish modern rural market circulation system.

### 3 Analysis on functions of supply and marketing cooperatives in rural circulation system

Long time of development renders supply and marketing cooperatives with advantages of urban and rural wide network resources, talents and operation, rich experience in rural circulation work, and natural connection with agriculture, rural areas and farmers, and also the advantages of many points, wide area, and long line. In recent years, the national supply and marketing cooperative system deeply promotes construction of "new network project", to constantly raise service level, making leading role of agricultural socialized service and rural circulation increasingly outstanding.

**3.1 Steadily promoting construction of circulation network for supply and marketing cooperatives** The largest resource and competition advantages of supply and marketing cooperatives are network widespread in urban and rural areas. County-level supply and marketing cooperative is the frontier of management and service works and also the key part linking other levels. In recent years, the county-level supply and marketing cooperative enters a new development stage and has basically established provincial, city, county, township, and village levels of circulation service network system with clear hierarchy and mutual promotion.

Provincial (autonomous regions and cities) supply and marketing cooperatives (hereafter referred to as provincial cooperatives), supply and marketing cooperatives in cities under the jurisdiction of municipal government (prefecture and league), and county-level supply and marketing cooperatives (district and banner) are gradually established. By the end of 2014, there had been 2771 county-level and above supply and marketing coopera-

tives, 28 more than 2010, including 32 provincial cooperatives, 335 cooperatives under provincial levels, 2403 county-level cooperatives, accounting for 84% of total county-level administrative division (2852)<sup>[8]</sup>.

In the whole system of supply and marketing cooperatives, the number of enterprises, grass-roots cooperatives and sites carrying out chain operation and delivery business are constantly increasing. By the end of 2014, the number reached 6732, 24950, and 325000 respectively, which were 2728, 3348, and 35600 more than 2010. The whole system of supply and marketing cooperatives has built 114326 various specialized cooperatives, 59509 more than 2010; 12.381 million farmers joined these cooperatives, 2.3227 million more than 2010. In total, it developed 1.055 million various chain operation sites, 43.23% more than 2010, covering more than 80% of towns and more than 50% administrative villages in the whole country.

Nowadays, supply and marketing cooperatives have established the consumer goods operating network with modern circulation as major part; chain delivery network for means of agricultural production with a long history is upgrading; characteristic agricultural and sideline product network tends towards improvement; renewable resource recycling network with broad market is integrating; it has basically established a chain operating network with delivery center in counties, supermarket in towns, and convenience store in villages, showing rural circulation network system beginning to take shape.

**3.2 Operating and sales income of supply and marketing cooperatives growing rapidly** With repeated construction of county-level supply and marketing cooperatives, grass-roots sites are constantly established, and both operating and sales income of supply and marketing cooperatives constantly grow. In 2014, the whole system of supply and marketing cooperatives realized total sales amount of 3764.6 billion yuan, growing about 17.2% compared with the same period of previous year, and 2.4 times of the 2010. Among these, means of agricultural production, agricultural and sideline products, consumer retails, and renewable resources account for 72.3% of total sales amount. The non-durable consumer goods grow at the highest speed, with retail sales up to 924.34 billion yuan, growing about 24.9% compared with the same period of previous year, accounting for 28.96% of total consumer goods retails of rural areas.

**3.3 Comprehensive services are gradually implementing** Supply and marketing cooperatives carry out comprehensive services through establishing village-level comprehensive service stations, carry out agricultural scientific and technological experiment and technological trainings through building scientific experimental station bases, and promote increase of farmers' income through establishing commercialized bases. By the end of 2014, the whole system of supply and marketing cooperatives had established 337000 comprehensive service cooperatives (centers), 117300 more than 2010, also established 52000 crop hospitals, 25000 more than 2010. No matter in means of agricultural production,

chemical fertilizer, and cotton field, or the number of sites and operating scale, supply and marketing cooperatives rank the leading position. In addition, it established 133000 hm<sup>2</sup> scientific experiment plot, carried out soil testing and formulated fertilization 791000 hm<sup>2</sup>, provided 13.658 million person/times technical training and information inquiry, and distributed 17.077 million copies of technical data. Besides, it established 37000 commodity bases, 20000 more than 2010, including 27000 for crop cultivation, 15000 more than 2010, and 9316 for breeding industry, 4445 more than 2010. Also, it connected 19.961 million farmers, 12.2399 million more than 2010, and helping farmers to realize income of 74.88 billion yuan.

**3.4 Carrying out renewable resource recycling and promoting construction of environment-friendly society** Supply and marketing cooperative is always an essential force for recycling of renewable resources in rural areas. With more than half century of development, the whole system of supply and marketing cooperatives has more than 2000 county-level and above waste and old commodity recycling enterprises. And 200 of them have the sales amount more than 100 million yuan, and 19 enterprises have sales amount above 1000 million yuan. Besides, there are 613 trading markets of waste and old commodities, 32 of which have turnover more than 100 million yuan; there are more than 150000 specialized recycling sites with more than one million workers and annual recycling amount more than 150 billion yuan, accounting for more than half of total recycling amount of the whole society<sup>[9]</sup>. In 2014, sales amount of renewable resources in the whole system of supply and marketing cooperatives reached 229.91 billion yuan, growing 4.4%, 137.438 billion yuan more than 2010. In the recycling of renewable resources, building of resource conserving, and environment-friendly society, and realizing green, low-carbon, and sustainable development of rural areas, it plays a great role and also boosts development of key industries and new strategic industries of regional circular economy.

## 4 Recommendations for bringing into full play functions of supply and marketing cooperatives and improving rural modern circulation system of China

With more than 60 years of reform and development, supply and marketing cooperatives play important bridge and link function relying on network advantages in urban and rural market, and promote development of urban and rural market. In the new period, supply and marketing cooperatives should catch the development opportunity of priority work of three rural issues, stick to the principle of serving agriculture, farmers and rural areas in accordance with requirements of transforming themselves and serving farmers, practically speed up deepening the reform, bring into play advantages, and constantly improve and strengthen promotion functions, and enhance rural financial service ability construction, and make effort to make supply and marketing cooperatives into important carriers of serving agriculture, farmers and rural areas, and also new young members and comprehensive platform providing serv-

ices for production and living of farmers.

#### 4.1 Gradually optimizing sales of agricultural products with the aid of network of supply and marketing cooperatives

At present, sales of agricultural products in western developed countries are mainly realized through supermarket, with proportion more than 70%; in the United States and Germany, the figure is as high as 95%, while in China, the proportion is only 6%<sup>[2]</sup>. Therefore, supply and marketing cooperatives should bring into basic advantages of circulation network covering the rural areas, accelerate construction of rural modern circulation service network, and support and promote development of new circulation form like rural supermarket. According to survey, agricultural products are mainly sold to whole sellers or individual dealers directly and the proportion through order is very low. China's rural informationization construction remains at starting stage, and information means for commodity circulation is relatively backward and the trading volume through e-commerce is relatively low. Among more than 4000 agricultural product wholesale markets, more than 98% deals with transactions in traditional manner. In the meantime, due to backward circulation infrastructure construction, lagging of technological development, the matching between product packaging standard and logistics facilities is not adequate, circulation and logistics efficiency is low, and the loss in the process of transportation is as huge as 25-30%, while the loss rate is only 1-2% in the United States<sup>[10]</sup>.

In 2015, the Ministry of Agriculture takes agricultural e-commerce as one of priority works. Supply and marketing cooperatives can bring into play advantages in sites, talents, and operation and management, promote effective connection between farmers and urban and rural agricultural product markets through carrying out businesses in means of agricultural production, agricultural and sideline products, retails of consumer goods, and use of renewable resources. Besides, supply and marketing cooperatives may ally with modern agricultural operating entities such as family farms, planting and breeding farmers, specialized farmers cooperatives, and agricultural leading enterprises, to promote construction of high quality agricultural product production bases, constantly expand scale of production bases, and improve quality and value of agricultural products through developing order-based agriculture, farmer and supermarket docking, direct sales and delivery, and e-commerce.

#### 4.2 Gradually strengthening construction of rural financial service ability through bringing into play advantages of organization

Since the Twelfth Five-Year Guideline of China, rural finance has been developing rapidly, rural financial system is preliminarily being established, coverage of rural financial services is gradually expanding, and service level is constantly improving. However, on the whole, China's rural financial development is still the weakest part in the entire financial system. It is recommended to further raise ability and level of rural financial service, and really realize win-win of rural finance and three rural issues in the context of accelerating promoting agricultural operation and ur-

ban and rural integrated development at moderate scale.

International development experience indicates that main channel for rural financial fund supply is cooperative finance. In the new period, cooperative finance will be the direction of rural financial development. General Office of the State Council also issued opinions about strengthening and regulating financial services for development of three rural issues<sup>[11]</sup>. China's supply and marketing cooperatives have complete network system from townships to counties, cities and provinces, and conform to the structure of building rural cooperative organizations and rural mutual-aid finance<sup>[12]</sup>. Supply and marketing cooperatives should seize the opportunity, focus on increasing financial service demands of large specialized farmers, family farms, specialized farmers cooperatives, agricultural leading enterprises, and cultivate and develop rural cooperative financial organizations on the basis of qualified specialized farmers cooperatives and supply and marketing cooperatives. It is recommended to explore and establish village-level cooperative financing assurance funds, support new operating entities to develop agricultural production, and establish service facilities including agricultural product production area wholesale market, retail market, warehousing and logistics facilities, and chain retail.

#### 4.3 Gradually promoting industrial upgrade of renewable resource recycling through expanding coverage scope

Strengthening control of agricultural diffused pollution and promoting construction of ecological civilization are fundamental requirements for building resource conserving and environment-friendly society. For waste and old renewable resources in rural living and agricultural production, supply and marketing cooperatives can bring into play traditional advantages of renewable resource operation. On the one hand, it is recommended to implement unified and standardized management through consolidating existing recycling sites; on the other hand, it is recommended to build direct operation and purchase sites and collecting and distributing markets with reasonable distribution through unified planning, and also explore comprehensive utilization fields with joint processing as link and processing and reproduction of industrial raw materials<sup>[13]</sup>.

It is recommended to improve renewable resource industry chain from recycling to processing with county as unit, and build three-in-one renewable resource recycling network with online waste recovery, community collection, and township direct operation sites as bases, collecting and distributing market as center, and processing and use as purpose, to solve the problem of recycling of waste and old mulching films for agricultural production, promote effective control of agricultural diffused pollution, practically solve rural environmental pollution, promote integrated control of rural environment in an all-round way, and realize industrial upgrade of renewable resource operating enterprises of supply and cooperative system in the new trend.

22. (in Chinese).

[2] CAO JJ. Analysis on the features and efficiency of several modern eco-agriculture models in Shandong Province[J]. China Soft Science, 2010,12:107-114. (in Chinese).

[3] QI ZH, WANG PC. Coupling mechanism of low-carbon agricultural ecological industry under game and interaction theory[J]. Forum on Science and Technology in China, 2010,11:136-141. (in Chinese).

[4] WU LY, QI ZH, *et al.* Countermeasures for internalization of environmental externalities in pig-raising industry—A case of floating dead pigs[J]. Research of Agricultural Modernization, 2013,06:694-697. (in Chinese).

[5] CHEN ZY, SHI DW. Development of the application of resource utilization technology in agricultural waste[J]. China Population,Resources and Environment, 2010,12:112-116. (in Chinese).

[6] LIN YF. Small farmers and economic rationality[J]. The Rural Economy and Society. 1988,03:31-33. (in Chinese).

[7] WU LY, QI ZH, *et al.* An empirical study on the influential of pig farmers to establish an eco-industrial chain[J]. Journal of China Agricultural University,2014,03:236-242. (in Chinese).

[8] ZHANG Y, QI ZH, *et al.* Study on the influence of family endowments on the environmental behavior of massive pig farmers under the situation of ecological compensation policy;Based on the survey of 248 massive pig farmers in Hubei Province[J]. Issues in Agricultural Economy, 2015(6):82-91, 112. (in Chinese).

[9] Ajzen I. Attitudes, traits and actions; Dispositional prediction of behavior in personality and social psychology[J]. Advances in Experimental Social Psychology, 1987, 20(1): 1-63.

[10] LIU XF, YANG ZH, WANG YP. Ecological cognition and behavior decision of poultry farmers; Based on field research of farmers in six provinces such as Shandong and Anhui[J]. China Population, Resources and Envi-

ronment, 2013(10):169-176. (in Chinese).

[11] Kliebenstein, James B, Lawrence, *et al.* Contracting and vertical coordination in the United States Pork Industry[J]. American Journal of Agricultural Economics, 1995, 77(5): 1213-1218.

[12] Boger S. Quality and contractual choice: A transaction cost approach to the polish hog market[J]. European Review of Agricultural Economics, 2001, 28(3): 241-261.

[13] WANG HT, WANG K. Analysis on influence factor of pig farmers production safety decision-making behavior[J]. Chinese Rural Economy, 2012(11):21-30, 43. (in Chinese).

[14] Guagnano GA, Stern PC, Dietz T. Influences on attitude-behavior relationships: A natural experiment with curbside recycling[J]. Environment and Behavior, 1995, 27:699-718.

[15] Christine A, Ervin David E. Ervin. Factors affecting the use of soil conservation practices: Hypotheses, evidence, and policy implications[J]. Land Economics,1982,58(3):277-292.

[16] Feder G, Just RE, Zilberman D. Adoption of agricultural innovations in developing countries: A survey [J]. Economic Development Cultural Change,1985, 33(2): 255-298.

[17] Sinden JA, King DA. Land condition, crop productivity, and the adoption of soil conservation measures[C]. Working Paper Presented at the Australian Agricultural Economics Society Conference, Melbourne, Australia, 1988.

[18] TAO QS, HU H, WANG QJ. Analysis on the influence factors of farmers in agricultural new technology adopted will with environmental constraints [J]. Statistics and Decision, 2013(1):106-110. (in Chinese).

[19] RONG TS. AMOS and research methods[M]. Chongqing: Chongqing University Press, 2010(2): 118. (in Chinese).

(From page 18)

# References

[1] HONG T. To accelerate the development of circulation industry in China's urban and rural areas[J]. China Business and Market, 2010(7): 9-13. (in Chinese).

[2] CHENG GQ. China's rural circulation system building: Current situation, issues and policy recommendations[J]. Problems of Agricultural Economy, 2007, 28(4): 59-62. (in Chinese).

[3] CHENG QX. The great development of cooperative economic organization [J]. China Co-Operation Economy, 2012(5): 1. (in Chinese).

[4] ZHOU L, WANG YX. Thinking on the construction of rural circulation system during "the 11th Five-Year Plan" in China[J]. Rural Economy, 2006(2): 94-97. (in Chinese).

[5] WANG XH. Study on the construction of agricultural products modern circulation system in China[J]. Reform of Economic System, 2011(4): 73-76. (in Chinese).

[6] Constructing agricultural products modern circulation system and promoting the rapid development of urban-rural integration[J]. Rural Finance Research, 2013(8): 1. (in Chinese).

[7] ZHANG HC, HAN HL. Comparison on agricultural products circulation sys-

tem of Japan and America[J]. World Agriculture, 2013(3): 37-38, 89. (in Chinese).

[8] The bulletin of general situation of national supply and marketing cooperatives in 2014[EB/OL]. <http://www.chinacoop.gov.cn/HTML/2015/02/26/qq23.html>. (in Chinese).

[9] Scientific development has obtained splendid achievement[N]. China CO-operation Times, 2012-10-19(4). (in Chinese).

[10] HE LL, WANG F. Agricultural product circulation system innovation research[J]. Logistics Engineering and Management, 2013(10): 165-166, 176. (in Chinese).

[11] Some opinions on the development of "agriculture, rural areas and farmers" promulgated by General Office of the State Council[EB/OL]. (2014-04-22)[2015-07-02]. [http://news.xinhuanet.com/fortune/2014-04/22/c\\_1110351933.htm](http://news.xinhuanet.com/fortune/2014-04/22/c_1110351933.htm). (in Chinese).

[12] ZHANG CH. Supply and marketing cooperatives can be able to become the 3rd pillar for rural financial service[J]. China Co-operation Economy, 2015(5):14. (in Chinese).

[13] LI CY. To develop circular economy using renewable resources[N]. Economic Daily, 2008-10-07. (in Chinese).